AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0066] of Patent Application Publication 2005/0104457 with the following amended paragraph:

[0066] The passive telemetry for feedback of information from the implanted device 104 to the external controller is carried out on the same RF fields as that which transfers energy to the implanted device, by modulation of the absorption r[[T]]ate within the implanted device. The principle is based on detuning of the coupled antennas 3, 4. The signal S to be transmitted back is used to vary the load within the implanted device 104 supplied by the RF-DC converter 5, so that a changing amount of RF energy is absorbed. The matching of the antennas 3, 4 varies at the same time, therefore the amplitude of the reflected wave changes in the external controller. By decoding the reflected wave, a signal S', proportional to the signal S can be extracted back in the external controller. Two different methods of coding the signal S exist:

Please replace paragraph [0068] of Patent Application Publication 2005/0104457 with the following amended paragraph:

[0068] 2. Modulation of the frequency of the amplitude modulation (FM-AM). As shown in FIG. 3, the signal S is applied to a voltage controlled oscillator (VCO) 8 such that the signal S is converted linearly into an oscillating signal at the frequency Fs, where Fs equals kXS. The signal Fs drives a switch 7 such that during the ON state of the switch 7 there is an increase in energy absorption from the RF-DC converter [[6]]5. Therefore the absorption rate is modulated at the frequency Fs and thus the frequency of the amplitude modulation of the reflected wave contains the information on the signal S. In the external controller, the directional coupler 2 separates the reflected wave where it can be decoded by FM demodulation in the demodulator 9 to obtain the signal S'. This method allows the transmission of different signals carried at different frequencies. It also has the advantage that the ON state of the switch can be very short and the absorption very strong without inducing an increase in average consumption and therefore the feedback transmission is less sensitive to variation in the quality of coupling between the antennas 3, 4.

Please replace paragraph [0078] of Patent Application Publication 2005/0104457 with the following amended paragraph:

[0078] The signals S_A and S_{RP} are converted into frequencies through the external oscillator 14 which is a voltage controlled oscillator (VCO). The voltage level of the signal S_A is applied to the external oscillator 14 to vary its frequency F_{osc} proportionally to the signal S_A. Thus F_{osc} contains all the information of S_A. When the movable member is [[as]] at the reference position, the detector described above is activated to produce the reference position signal S_{RP} which is used to induce a constant shift of the frequency F_{osc}, which shift is easily distinguishable from the variations due to signals S_A. If a relaxation oscillator is used as oscillator 14, the signals S_A and S_{RP} modify the charging current of the external resistor capacitor network. Preferably, the relaxation oscillator consists of an external resistor-capacitor network connected to a transistor and a logic circuit implemented in the micro controller circuitry. With S_A and S_{RP}, the goal is to modify the charging current of the capacitor of the RC network in order to change the frequency of the relaxation oscillator. If the charging current is low, the voltage of the capacitor increases slowly and when the threshold of the transistor is reached, the capacitor discharges through the transistor. The frequency of the charging-discharging sequence depends on the charging current. If a crystal oscillator is used as oscillator 14, S_A and S_{RP} modify the capacitor of the resonant circuit. Preferably the crystal oscillator circuit consists of a crystal in parallel with capacitors. The crystal and capacitors form a resonant circuit which oscillates at a fixed frequency. This frequency can be adjusted by changing the capacitors. If one of these capacitors is a Varicap (kind of diode), it is possible to vary its capacitance value by modifying the reverse voltage applied on it. S_A and S_{RP} can be used to modify this voltage.